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REMARKS

Claims 1-21, 23-25 and 27-35 are pending in the application upon entry of this amendment. Claims 21, 25 and 32 have been amended herein, and claims 22 and 26 have been canceled. Favorable reconsideration of the application, as amended, is respectfully requested.

I.   *REJECTION OF CLAIM 32 UNDER 35 USC §112, 2nd ¶*

Claim 32 is rejected under 35 USC §112, second paragraph, as being indefinite. Specifically, the Examiner indicates the term "I/F control" on line 3 is unclear as to what kind of controlling operation.

"I/F" refers to interface as is known by those having ordinary skill in the art. In order to clarify such abbreviation, claim 32 has been amended herein to refer to "an interface control operation program" rather than simply "I/F control means". Support for such amendment is provided in the present specification at page 26, lines 16-17, for example. The process of the interface control operation is further described in the present specification at page 27, lines 16-21 (e.g., describing waiting for and receiving a command from the upper control unit 501).

In view of such amendment, withdrawal of the rejection of claim 32 is respectfully requested.

II.   *REJECTION OF CLAIMS 1-35 UNDER 35 USC §103(a)*

Claims 1-3, 5-6, 8-9, 12, 14-18, 21, 23-25 and 27-28 stand rejected under 35 USC §103(a) based on *Takahashi et al.* Remaining claims 4, 7, 10-11, 13, 19-20, 22, 26 and 29-35 stand rejected under 35 USC §103(a) based on *Takahashi et al.* in view of *Kon.* Withdrawal of each of these rejections is respectfully requested for at least the following reasons.

i.   *Takahashi et al.*

Takahashi et al. relates to a memory card which may serve as a reusable prepaid telephone card. Prepaid-money data is stored in a user memory constituted of

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a flash EEPROM, and is decreased as the card is used. When the prepaid-money data becomes zero, the user memory is initialized for reuse. The memory card further includes an EPROM to which data of a predetermined number of times of initialization is preset and which decreases in data of the number of times of initialization. The card further includes an initialization control logic for executing initialization in response to an initialization command until data of the EPROM becomes zero, and inhabiting the initialization even though the initialization command is input when the data becomes zero (See, e.g., abstract).
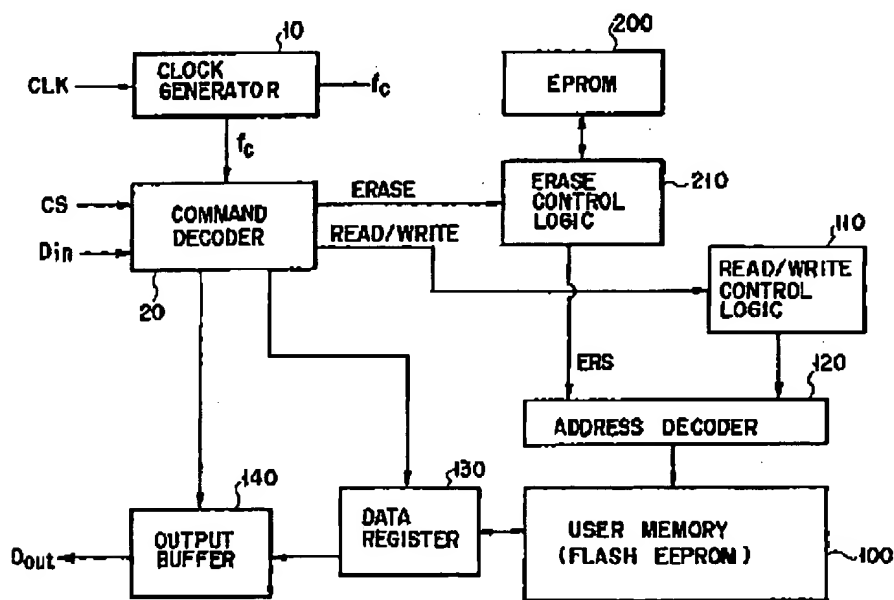

Fig. 1 of Takahashi et al.

For example, Fig. 1 of *Takahashi et al.* (reproduced above) describes a memory card which includes a user memory 100 made up of a flash EEPROM. Call units are stored within the user memory 100. The memory cells making up the call units are initialized to a logic "number 1." The call units are sequentially rewritten from "1" to "0" in response to a command from a user terminal device "e.g. telephone" as the call units are utilized. In order that the memory card need not be discarded once all the call units

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have been utilized, the memory card includes the EPROM 200. The number of times
the card may be initialized is stored in the EPROM 200. When the number becomes 0,
the card may no longer be initialized (See, e.g., column 3, line 52-column 4, line 8).

A critical feature of the system in *Takahashi et al.* is that the EPROM 200 is
incapable of being rewritten or initialized. Specifically, the EPROM 200 cannot be
accessed or rewritten by an external terminal device. The card can thus be prevented
from being initialized or reused over a predetermined number of times.

Thus, while *Takahashi et al.* describes storing count information in memory via
the EPROM 200, such count information is not externally accessible so as to be
capable of being rewritten externally.

ii.   Claims 1, 12 and 29

In *Takahashi et al.*, a set number of rewrites of the call units (as determined by
the EPROM 200) is simply by reducing a counter in the EPROM 200. In one
embodiment, the EPROM 200 has memory cells the number of which corresponds to
the number of times the prepaid card can be initialized. The data of the memory cells is
inverted whenever the card is initialized, and initialization can be continued until data of
all the memory cells are inverted. In another embodiment, the EPROM 200 is replaced
with a fuse ROM having fuses the number of which corresponds to the number of times
allowing the initialization.
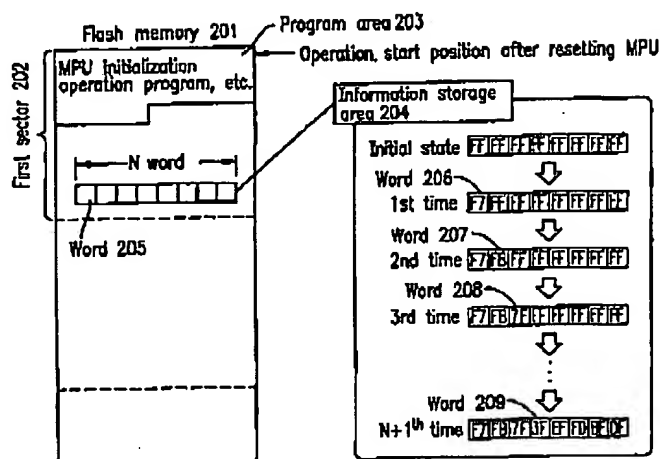
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Fig. 2 of Present Application

Claims 1, 12 and 29 do not simply refer to the reduction of a counter as taught in *Takahashi et al.* Rather, as exemplified in Fig 2 of the application (reproduced above), information may be *written to the information storage area 204 in units of WORDs*, each WORD including a plurality of bits.

Takahashi et al., with its teachings of a bit-by-bit alteration of the count in EPROM 200, does not teach or suggestion a memory count managing method or apparatus as recited in claims 1, 12 and 29. *Takahashi et al.* does not teach or suggest information written to the EPROM 200 in units of WORDs as recited in the claims. Moreover, the secondary reference to *Kon* does not make up for the deficiencies in *Takahashi et al.* Accordingly, withdrawal of the rejection of such claims is respectfully requested.

iii.   Claims 21 and 25

Claims 21 and 25 have been amended to incorporate the features of claims 22 and 26, respectively. More particularly, amended claims 21 and 25 recite the feature wherein the first sector of the non-volatile memory includes a first program to be executed after a reset/by the micro processor unit.

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In *Takahashi et al.*, it is an essential condition of the device to construct the user memory 100 and the EPROM 200 with two memories, each having a different property. Namely, the necessary condition in *Takahashi et al.* is that the user memory 100 is an erasable and recordable memory such as a Flash memory, while the EPROM 200 is an un-erasable and un-recordable memory such as a fuse.

With the present invention, it is possible to place the content 210 and the contents usage count storage area 420 within a single Flash memory. One feature of the present invention different from *Takahashi et al.* is that since the Contents 210 is located within the same first sector 202 as the program area 203 including an initialization operation program and the like, it can be protected to make the Contents usage count storage area 420 impossible to erase.

Amended claim 21 emphasizes how the contents usage count storage area is in a sector which includes a first program to be executed after a reset. Claim 26 describes how the first sector includes a first program to be executed by the micro processor unit. In each case, the information may be erased. In *Takahashi et al.*, it is impossible to erase the information as explained above. Accordingly, *Takahashi et al.* does not teach or suggest the features of amended claims 21 and 25.

iv.   *Remaining Claims*

Claims 4, 11, 13, 20, 29 and 30-35 recite features similar to amended claims 21 and 25. Accordingly, these claims too may be distinguished over the teachings of *Takahashi et al.* Again, *Kon* does not make up for the deficiencies in *Takahashi et al.*

Further, it is noted that the Examiner relies on *Kon* for teaching the aspects of claim 4. However, such information in *Kon* merely relates to protecting a user against the unexpected failure of the flash memory. The Examiner argues it would have been obvious to modify *Takahashi et al.* to include the information storage area in the same sector as an initialization operation program. However, this would be contrary to both the purpose of *Takahashi et al.* and the purpose of *Kon.* *Takahashi et al.* requires an EPROM which is *un*accessible. *Kon*, on the other hand, relates to an EPROM which protects the user from being unable to access the memory (due to end of lifetime).

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Clearly one having ordinary skill in the art would not be motivated to combine such references seeking opposite goals.

For at least the above reasons, withdrawal of the rejection is respectfully requested.

III.   CONCLUSION

Accordingly, all claims are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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